

**In the Claims:**

This listing of claims will replace all prior versions, and listing, of claims in the application:

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1. (amended) A reflective imaging encoder comprising:

a substrate,

an emitter mounted on the substrate emitting light,

a diffuse reflective coder reflecting light from the emitter,

10 an imaging lens forming an inverted imaging of the reflected light from the coder, ~~and~~

a ~~an~~ image detector mounted on the substrate receiving the inverted image from the imaging lens, and

a baffle between the emitter and the image detector.

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2. (amended) The reflective imaging encoder of Claim 1 where the ~~encoder is a code wheel~~ image detector is a photodiode array.

3. (amended) The reflective imaging encoder of Claim 1 where the ~~encoder is a code strip~~ image detector is a CMOS imaging sensor.

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4. The reflective imaging encoder of Claim 1 where the emitter is a light emitting diode.

25 5. The reflective imaging encoder of Claim 4 where the light emitting diode is an unencapsulated light emitting diode chip.

6. The reflective imaging encoder of Claim 4 where the light emitting diode is encapsulated.

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7. The reflective imaging encoder of Claim 4 where the emitter is a packaged light emitting diode.

8. The reflective imaging encoder of Claim 6 where the encapsulation forms an optical axis.
- 5 9. The reflective imaging encoder of Claim 8 where the light emitting diode is mounted on the optical axis.
- 10 10. The reflective imaging encoder of Claim 8 where the light emitting diode is mounted offset from the optical axis.
11. The reflective imaging encoder of Claim 6 where the light emitting diode includes a reflector cup.
12. The reflective imaging encoder of Claim 11 where the encapsulation forms an optical axis.
- 15 13. The reflective imaging encoder of Claim 12 where the light emitting diode is mounted on the optical axis.
- 20 14. The reflective imaging encoder of Claim 12 where the light emitting diode is mounted offset from the optical axis.
15. The reflective imaging encoder of Claim 4 where the emitter is a plurality of light emitting diodes.
- 25 16. The reflective imaging encoder of Claim 1 where the imaging lens is separate from the detector.
17. The reflective imaging encoder of Claim 1 where the imaging lens is incorporated into the encapsulation of the detector.
- 30 18. The reflective imaging encoder of Claim 1 further including an aperture between the coder and the imaging lens.

19. The reflective imaging encoder of Claim 1 further including an aperture between the imaging lens and the detector.

20. The reflective imaging encoder of Claim 1 further including a first aperture  
5 between the coder and the imaging lens and a second aperture between the imaging lens and the detector.

21. (canceled)

10 22. (canceled)

23. (canceled)

24. (canceled)

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25. (canceled)

26. The reflective imaging encoder of Claim 1 where the detector is mounted on the optical axis of the imaging lens.

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27. (canceled)